

[DISCUSSION DRAFT]

SEPTEMBER 28, 2003

1 **TITLE VII—VEHICLES AND**
2 **FUELS**
3 **Subtitle A—Existing Programs**

4 **SEC. 701. USE OF ALTERNATIVE FUELS BY DUAL-FUELED**
5 **VEHICLES.**

6 Section 400AA(a)(3)(E) of the Energy Policy and
7 Conservation Act (42 U.S.C. 6374(a)(3)(E)) is amended
8 to read as follows:

9 “(E)(i) Dual fueled vehicles acquired pursuant to this
10 section shall be operated on alternative fuels unless the
11 Secretary determines that an agency qualifies for a waiver
12 of such requirement for vehicles operated by the agency
13 in a particular geographic area in which—

14 “(I) the alternative fuel otherwise required to
15 be used in the vehicle is not reasonably available to
16 retail purchasers of the fuel, as certified to the Sec-
17 retary by the head of the agency; or

18 “(II) the cost of the alternative fuel otherwise
19 required to be used in the vehicle is unreasonably
20 more expensive compared to gasoline, as certified to
21 the Secretary by the head of the agency.

22 “(ii) The Secretary shall monitor compliance
23 with this subparagraph by all such fleets and shall

1 report annually to Congress on the extent to which
2 the requirements of this subparagraph are being
3 achieved. The report shall include information on
4 annual reductions achieved from the use of petro-
5 leum-based fuels and the problems, if any, encoun-
6 tered in acquiring alternative fuels.”.

7 **SEC. 702. NEIGHBORHOOD ELECTRIC VEHICLES.**

8 Section 301 of the Energy Policy Act of 1992 (42
9 U.S.C. 13211) is amended—

10 (1) in paragraph (3), by striking “or a dual
11 fueled vehicle” and inserting “, a dual fueled vehicle,
12 or a neighborhood electric vehicle”;

13 (2) in paragraph (13), by striking “and” at the
14 end;

15 (3) in paragraph (14), by striking the period at
16 the end and inserting “; and”; and

17 (4) by adding at the end the following:

18 “(15) the term ‘neighborhood electric vehicle’
19 means a motor vehicle that—

20 “(A) meets the definition of a low-speed
21 vehicle (as defined in part 571 of title 49, Code
22 of Federal Regulations);

23 “(B) meets the definition of a zero-emis-
24 sion vehicle (as defined in section 86.1702–99
25 of title 40, Code of Federal Regulations);

1 “(C) meets the requirements of Federal
2 Motor Vehicle Safety Standard No. 500; and

3 “(D) has a maximum speed of not greater
4 than 25 miles per hour.”.

5 **SEC. 703. CREDITS FOR MEDIUM AND HEAVY DUTY DEDI-**
6 **CATED VEHICLES.**

7 Section 508 of the Energy Policy Act of 1992 (42
8 U.S.C. 13258) is amended by adding at the end the fol-
9 lowing:

10 “(e) CREDIT FOR PURCHASE OF MEDIUM AND
11 HEAVY DUTY DEDICATED VEHICLES.—

12 “(1) DEFINITIONS.—In this subsection:

13 “(A) HEAVY DUTY DEDICATED VEHI-
14 CLE.—The term ‘heavy duty dedicated vehicle’
15 means a dedicated vehicle that has a gross vehi-
16 cle weight rating of more than 14,000 pounds.

17 “(B) MEDIUM DUTY DEDICATED VEHI-
18 CLE.—The term ‘medium duty dedicated vehi-
19 cle’ means a dedicated vehicle that has a gross
20 vehicle weight rating of more than 8,500
21 pounds but not more than 14,000 pounds.

22 “(2) CREDITS FOR MEDIUM DUTY VEHICLES.—
23 The Secretary shall issue 2 full credits to a fleet or
24 covered person under this title, if the fleet or covered
25 person acquires a medium duty dedicated vehicle.

1 “(3) CREDITS FOR HEAVY DUTY VEHICLES.—

2 The Secretary shall issue 3 full credits to a fleet or
3 covered person under this title, if the fleet or covered
4 person acquires a heavy duty dedicated vehicle.

5 “(4) USE OF CREDITS.—At the request of a
6 fleet or covered person allocated a credit under this
7 subsection, the Secretary shall, for the year in which
8 the acquisition of the dedicated vehicle is made,
9 treat that credit as the acquisition of 1 alternative
10 fueled vehicle that the fleet or covered person is re-
11 quired to acquire under this title.”.

12 **SEC. 704. INCREMENTAL COST ALLOCATION.**

13 Section 303(c) of the Energy Policy Act of 1992 (42
14 U.S.C. 13212(c) is amended by striking “may” and insert-
15 ing “shall”.

16 **SEC. 705. ALTERNATIVE COMPLIANCE AND FLEXIBILITY.**

17 (a) ALTERNATIVE COMPLIANCE.—

18 (1) IN GENERAL.—Title V of the Energy Policy
19 Act of 1992 (42 U.S.C. 13251 et seq.) is amended—

20 (A) by redesignating section 514 as section
21 515; and

22 (B) by inserting after section 513 the fol-
23 lowing:

1 **“SEC. 514. ALTERNATIVE COMPLIANCE.**

2 “(a) APPLICATION FOR WAIVER.—Any covered per-
3 son subject to section 501 and any State subject to section
4 507(o) may petition the Secretary for a waiver of the ap-
5 plicable requirements of section 501 or 507(o).

6 “(b) GRANT OF WAIVER.—The Secretary may grant
7 a waiver of the requirements of section 501 or 507(o)
8 upon a showing that the fleet owned, operated, leased, or
9 otherwise controlled by the State or covered person—

10 “(1) will achieve a reduction in its annual con-
11 sumption of petroleum fuels equal to the reduction
12 in consumption of petroleum that would result from
13 compliance with section 501 or 507(o); and

14 “(2) is in compliance with all applicable vehicle
15 emission standards established by the Administrator
16 under the Clean Air Act (42 U.S.C. 7401 et seq.).

17 “(c) REVOCATION OF WAIVER.—The Secretary shall
18 revoke any waiver granted under this section if the State
19 or covered person fails to comply with subsection (b).”.

20 “(2) TABLE OF CONTENTS AMENDMENT.—The
21 table of contents of the Energy Policy Act of 1992
22 (42 U.S.C. prec. 13201) is amended by striking the
23 item relating to section 514 and inserting the fol-
24 lowing:

“Sec. 514. Alternative compliance.

“Sec. 515. Authorization of appropriations.”.

1 (b) CREDITS.—Section 508 of the Energy Policy Act
2 of 1992 (42 U.S.C. 13258) (as amended by section 703)
3 is amended—

4 (1) by redesignating subsections (b) through (e)
5 as subsections (c) through (f), respectively;

6 (2) by striking subsection (a) and inserting the
7 following:

8 “(a) IN GENERAL.—The Secretary shall allocate a
9 credit to a fleet or covered person that is required to ac-
10 quire an alternative fueled vehicle under this title, if that
11 fleet or person acquires—

12 “(1) an alternative fueled vehicle in excess of
13 the number that fleet or person is required to ac-
14 quire under this title;

15 “(2) an alternative fueled vehicle before the
16 date on which that fleet or person is required to ac-
17 quire an alternative fueled vehicle under this title; or

18 “(3) that is eligible to receive credit under sub-
19 section (b).

20 “(b) MAXIMUM AVAILABLE POWER.—The Secretary
21 shall allocate credit to a fleet under subsection (a)(3) for
22 the acquisition by the fleet of a hybrid vehicle as follows:

23 “(1) For a hybrid vehicle with at least 4 per-
24 cent but less than 10 percent maximum available

1 power, the Secretary shall allocate 25 percent of 1
2 credit.

3 “(2) For a hybrid vehicle with at least 10 per-
4 cent but less than 20 percent maximum available
5 power, the Secretary shall allocate 50 percent of 1
6 credit.

7 “(3) For a hybrid vehicle with at least 20 per-
8 cent but less than 30 percent maximum available
9 power, the Secretary shall allocate 75 percent of 1
10 credit.

11 “(4) For a hybrid vehicle with 30 percent or
12 more maximum available power, the Secretary shall
13 allocate 1 credit.”; and

14 (3) by adding at the end the following:

15 “(g) CREDIT FOR INVESTMENT IN ALTERNATIVE
16 FUEL INFRASTRUCTURE.—

17 “(1) DEFINITION OF QUALIFYING INFRASTRUC-
18 TURE.—In this subsection, the term ‘qualifying in-
19 frastructure’ means—

20 “(A) equipment required to refuel or re-
21 charge alternative fueled vehicles;

22 “(B) facilities or equipment required to
23 maintain, repair, or operate alternative fueled
24 vehicles; and

1 “(C) such other activities as the Secretary
2 considers to constitute an appropriate expendi-
3 ture in support of the operation, maintenance,
4 or further widespread adoption of or utilization
5 of alternative fueled vehicles.

6 “(2) ISSUANCE OF CREDITS.—The Secretary
7 shall issue a credit to a fleet or covered person under
8 this title for investment in qualifying infrastructure
9 if the qualifying infrastructure is open to the general
10 public during regular business hours.

11 “(3) AMOUNT.—For the purpose of credits
12 under this subsection—

13 “(A) 1 credit shall be equal to a minimum
14 investment of \$25,000 in cash or equivalent ex-
15 penditure, as determined by the Secretary; and

16 “(B) except in the case of a Federal or
17 State fleet, no part of the investment may be
18 provided by Federal or State funds.

19 “(4) USE OF CREDITS.—At the request of a
20 fleet or covered person allocated a credit under this
21 subsection, the Secretary shall, for the year in which
22 the investment is made, treat that credit as the ac-
23 quisition of 1 alternative fueled vehicle that the fleet
24 or covered person is required to acquire under this
25 title.

1 “(h) DEFINITION OF MAXIMUM AVAILABLE
2 POWER.—In this section, the term ‘maximum available
3 power’ means the quotient obtained by dividing—

4 “(1) the maximum power available from the en-
5 ergy storage device of a hybrid vehicle, during a
6 standard 10-second pulse power or equivalent test;
7 by

8 “(2) the sum of—

9 “(A) the maximum power described in sub-
10 paragraph (A); and

11 “(B) the net power of the internal combus-
12 tion or heat engine, as determined in accord-
13 ance with standards established by the Society
14 of Automobile Engineers.”.

15 (c) LEASE CONDENSATE FUELS.—Section 301 of the
16 Energy Policy Act of 1992 (42 U.S.C. 13211) (as amend-
17 ed by section 702) is amended—

18 (1) in paragraph (2), by inserting “mixtures
19 containing 50 percent or more by volume of lease
20 condensate or fuels extracted from lease conden-
21 sate;” after “liquefied petroleum gas;”;

22 (2) in paragraph (14)—

23 (A) by inserting “mixtures containing 50
24 percent or more by volume of lease condensate

1 or fuels extracted from lease condensate;” after
2 “liquefied petroleum gas;”; and

3 (B) by striking “and” at the end;

4 (3) in paragraph (15), by striking the period at
5 the end and inserting “; and”; and

6 (4) by adding at the end the following:

7 “(16) the term ‘lease condensate’ means a mix-
8 ture, primarily of pentanes and heavier hydro-
9 carbons, that is recovered as a liquid from natural
10 gas in lease separation facilities.”.

11 (d) LEASE CONDENSATE USE CREDITS.—

12 (1) IN GENERAL.—Title III of the Energy Pol-
13 icy Act of 1992 (42 U.S.C. 13211 et seq.) is amend-
14 ed by adding at the end the following:

15 **“SEC. 313. LEASE CONDENSATE USE CREDITS.**

16 “(a) IN GENERAL.—Subject to subsection (d), the
17 Secretary shall allocate 1 credit under this section to a
18 fleet or covered person for each qualifying volume of the
19 lease condensate component of fuel containing at least 50
20 percent lease condensate, or fuels extracted from lease
21 condensate, after the date of enactment of this section for
22 use by the fleet or covered person in vehicles owned or
23 operated by the fleet or covered person that weigh more
24 than 8,500 pounds gross vehicle weight rating.

1 “(b) REQUIREMENTS.—A credit allocated under this
2 section—

3 “(1) shall be subject to the same exceptions,
4 authority, documentation, and use of credits that are
5 specified for qualifying volumes of biodiesel in sec-
6 tion 312; and

7 “(2) shall not be considered a credit under sec-
8 tion 508.

9 “(c) REGULATION.—

10 “(1) IN GENERAL.—Subject to subsection (d),
11 not later than January 1, 2004, after the collection
12 of appropriate information and data that consider
13 usage options, uses in other industries, products, or
14 processes, potential volume capacities, costs, air
15 emissions, and fuel efficiencies, the Secretary shall
16 promulgate a regulation establishing requirements
17 and procedures for the implementation of this sec-
18 tion.

19 “(2) QUALIFYING VOLUME.—The regulation
20 shall include a determination of an appropriate
21 qualifying volume for lease condensate, except that
22 in no case shall the Secretary determine that the
23 qualifying volume for lease condensate is less than
24 1,125 gallons.

1 “(d) APPLICABILITY.—This section applies unless the
2 Secretary finds that the use of lease condensate as an al-
3 ternative fuel would adversely affect public health or safe-
4 ty or ambient air quality or the environment.”.

5 (2) TABLE OF CONTENTS AMENDMENT.—The
6 table of contents of the Energy Policy Act of 1992
7 (42 U.S.C. prec. 13201) is amended by adding at
8 the end of the items relating to title III the fol-
9 lowing:

“Sec. 313. Lease condensate use credits.”.

10 (e) EMERGENCY EXEMPTION.—Section 301 of the
11 Energy Policy Act of 1992 (42 U.S.C. 13211) (as amend-
12 ed by section 702 and this section) is amended in para-
13 graph (9)(E) by inserting before the semicolon at the end
14 “, including vehicles directly used in the emergency repair
15 of transmission lines and in the restoration of electricity
16 service following power outages, as determined by the Sec-
17 retary”.

18 **SEC. 706. REVIEW OF ENERGY POLICY ACT OF 1992 PRO-**
19 **GRAMS.**

20 (a) IN GENERAL.—Not later than 180 days after the
21 date of enactment of this section, the Secretary of Energy
22 shall complete a study to determine the effect that titles
23 III, IV, and V of the Energy Policy Act of 1992 (42
24 U.S.C. 13211 et seq.) have had on—

1 (1) the development of alternative fueled vehicle
2 technology;

3 (2) the availability of that technology in the
4 market; and

5 (3) the cost of alternative fueled vehicles.

6 (b) TOPICS.—As part of the study under subsection

7 (a), the Secretary shall specifically identify—

8 (1) the number of alternative fueled vehicles ac-
9 quired by fleets or covered persons required to ac-
10 quire alternative fueled vehicles;

11 (2) the quantity, by type, of alternative fuel ac-
12 tually used in alternative fueled vehicles acquired by
13 fleets or covered persons;

14 (3) the quantity of petroleum displaced by the
15 use of alternative fuels in alternative fueled vehicles
16 acquired by fleets or covered persons;

17 (4) the direct and indirect costs of compliance
18 with requirements under titles III, IV, and V of the
19 Energy Policy Act of 1992 (42 U.S.C. 13211 et
20 seq.), including—

21 (A) vehicle acquisition requirements im-
22 posed on fleets or covered persons;

23 (B) administrative and recordkeeping ex-
24 penses;

25 (C) fuel and fuel infrastructure costs;

1 (D) associated training and employee ex-
2 penses; and

3 (E) any other factors or expenses the Sec-
4 retary determines to be necessary to compile re-
5 liable estimates of the overall costs and benefits
6 of complying with programs under those titles
7 for fleets, covered persons, and the national
8 economy;

9 (5) the existence of obstacles preventing compli-
10 ance with vehicle acquisition requirements and in-
11 creased use of alternative fuel in alternative fueled
12 vehicles acquired by fleets or covered persons; and

13 (6) the projected impact of amendments to the
14 Energy Policy Act of 1992 made by this title.

15 (c) REPORT.—Upon completion of the study under
16 this section, the Secretary shall submit to Congress a re-
17 port that describes the results of the study and includes
18 any recommendations of the Secretary for legislative or
19 administrative changes concerning the alternative fueled
20 vehicle requirements under titles III, IV and V of the En-
21 ergy Policy Act of 1992 (42 U.S.C. 13211 et seq.).

1 **Subtitle B—Hybrid Vehicles, Ad-**
2 **vanced Vehicles, and Fuel Cell**
3 **Buses**

4 **PART 1—HYBRID VEHICLES**

5 **SEC. 711. HYBRID VEHICLES.**

6 The Secretary of Energy shall accelerate efforts di-
7 rected toward the improvement of batteries and other re-
8 chargeable energy storage systems, power electronics, hy-
9 brid systems integration, and other technologies for use
10 in hybrid vehicles.

11 **PART 2—ADVANCED VEHICLES**

12 **SEC. 721. DEFINITIONS.**

13 In this part:

14 (1) **ALTERNATIVE FUELED VEHICLE.**—

15 (A) **IN GENERAL.**—The term “alternative
16 fueled vehicle” means a vehicle propelled solely
17 on an alternative fuel (as defined in section 301
18 of the Energy Policy Act of 1992 (42 U.S.C.
19 13211)).

20 (B) **EXCLUSION.**—The term “alternative
21 fueled vehicle” does not include a vehicle that
22 the Secretary determines, by regulation, does
23 not yield substantial environmental benefits
24 over a vehicle operating solely on gasoline or
25 diesel derived from fossil fuels.

1 (2) FUEL CELL VEHICLE.—The term “fuel cell
2 vehicle” means a vehicle propelled by an electric
3 motor powered by a fuel cell system that converts
4 chemical energy into electricity by combining oxygen
5 (from air) with hydrogen fuel that is stored on the
6 vehicle or is produced onboard by reformation of a
7 hydrocarbon fuel. Such fuel cell system may or may
8 not include the use of auxiliary energy storage sys-
9 tems to enhance vehicle performance.

10 (3) HYBRID VEHICLE.—The term “hybrid vehi-
11 cle” means a medium or heavy duty vehicle propelled
12 by an internal combustion engine or heat engine
13 using any combustible fuel and an onboard recharge-
14 able energy storage device.

15 (4) NEIGHBORHOOD ELECTRIC VEHICLE.—The
16 term “neighborhood electric vehicle” means a motor
17 vehicle that—

18 (A) meets the definition of a low-speed ve-
19 hicle (as defined in part 571 of title 49, Code
20 of Federal Regulations);

21 (B) meets the definition of a zero-emission
22 vehicle (as defined in section 86.1702–99 of
23 title 40, Code of Federal Regulations);

24 (C) meets the requirements of Federal
25 Motor Vehicle Safety Standard No. 500; and

1 (D) has a maximum speed of not greater
2 than 25 miles per hour.

3 (5) PILOT PROGRAM.—The term “pilot pro-
4 gram” means the competitive grant program estab-
5 lished under section 722.

6 (6) SECRETARY.—The term “Secretary” means
7 the Secretary of Energy.

8 (7) ULTRA-LOW SULFUR DIESEL VEHICLE.—
9 The term “ultra-low sulfur diesel vehicle” means a
10 vehicle manufactured in any of model years 2002
11 through 2006 powered by a heavy-duty diesel engine
12 that—

13 (A) is fueled by diesel fuel that contains
14 sulfur at not more than 15 parts per million;
15 and

16 (B) emits not more than the lesser of—

17 (i) for vehicles manufactured in—

18 (I) model year 2003, 3.0 grams
19 per brake horsepower-hour of oxides
20 of nitrogen and .01 grams per brake
21 horsepower-hour of particulate matter;
22 and

23 (II) model years 2004 through
24 2006, 2.5 grams per brake horse-
25 power-hour of nonmethane hydro-

1 carbons and oxides of nitrogen and
2 .01 grams per brake horsepower-hour
3 of particulate matter; or
4 (ii) the quantity of emissions of non-
5 methane hydrocarbons, oxides of nitrogen,
6 and particulate matter of the best-per-
7 forming technology of ultra-low sulfur die-
8 sel vehicles of the same class and applica-
9 tion that are commercially available.

10 **SEC. 722. PILOT PROGRAM.**

11 (a) ESTABLISHMENT.—The Secretary, in consulta-
12 tion with the Secretary of Transportation, shall establish
13 a competitive grant pilot program, to be administered
14 through the Clean Cities Program of the Department of
15 Energy, to provide not more than 15 geographically dis-
16 persed project grants to State governments, local govern-
17 ments, or metropolitan transportation authorities to carry
18 out a project or projects for the purposes described in sub-
19 section (b).

20 (b) GRANT PURPOSES.—A grant under this section
21 may be used for the following purposes:

- 22 (1) The acquisition of alternative fueled vehicles
23 or fuel cell vehicles, including—
24 (A) passenger vehicles (including neighbor-
25 hood electric vehicles); and

1 (B) motorized 2-wheel bicycles, scooters, or
2 other vehicles for use by law enforcement per-
3 sonnel or other State or local government or
4 metropolitan transportation authority employ-
5 ees.

6 (2) The acquisition of alternative fueled vehi-
7 cles, hybrid vehicles, or fuel cell vehicles, including—

8 (A) buses used for public transportation or
9 transportation to and from schools;

10 (B) delivery vehicles for goods or services;
11 and

12 (C) ground support vehicles at public air-
13 ports (including vehicles to carry baggage or
14 push or pull airplanes toward or away from ter-
15 minal gates).

16 (3) The acquisition of ultra-low sulfur diesel ve-
17 hicles.

18 (4) Installation or acquisition of infrastructure
19 necessary to directly support an alternative fueled
20 vehicle, fuel cell vehicle, or hybrid vehicle project
21 funded by the grant, including fueling and other
22 support equipment.

23 (5) Operation and maintenance of vehicles, in-
24 frastructure, and equipment acquired as part of a
25 project funded by the grant.

1 (c) APPLICATIONS.—

2 (1) REQUIREMENTS.—

3 (A) IN GENERAL.—The Secretary shall
4 issue requirements for applying for grants
5 under the pilot program.

6 (B) MINIMUM REQUIREMENTS.—At a min-
7 imum, the Secretary shall require that an appli-
8 cation for a grant—

9 (i) be submitted by the head of a
10 State or local government or a metropoli-
11 tan transportation authority, or any com-
12 bination thereof, and a registered partici-
13 pant in the Clean Cities Program of the
14 Department of Energy; and

15 (ii) include—

16 (I) a description of the project
17 proposed in the application, including
18 how the project meets the require-
19 ments of this part;

20 (II) an estimate of the ridership
21 or degree of use of the project;

22 (III) an estimate of the air pollu-
23 tion emissions reduced and fossil fuel
24 displaced as a result of the project,
25 and a plan to collect and disseminate

1 environmental data, related to the
2 projects to be funded under the grant,
3 over the life of the projects;

4 (IV) a description of how the
5 project will be sustainable without
6 Federal assistance after the comple-
7 tion of the term of the grant;

8 (V) a complete description of the
9 costs of the project, including acquisi-
10 tion, construction, operation, and
11 maintenance costs over the expected
12 life of the project;

13 (VI) a description of which costs
14 of the project will be supported by
15 Federal assistance under this part;
16 and

17 (VII) documentation to the satis-
18 faction of the Secretary that diesel
19 fuel containing sulfur at not more
20 than 15 parts per million is available
21 for carrying out the project, and a
22 commitment by the applicant to use
23 such fuel in carrying out the project.

1 (2) PARTNERS.—An applicant under paragraph
2 (1) may carry out a project under the pilot program
3 in partnership with public and private entities.

4 (d) SELECTION CRITERIA.—In evaluating applica-
5 tions under the pilot program, the Secretary shall—

6 (1) consider each applicant's previous experi-
7 ence with similar projects; and

8 (2) give priority consideration to applications
9 that—

10 (A) are most likely to maximize protection
11 of the environment;

12 (B) demonstrate the greatest commitment
13 on the part of the applicant to ensure funding
14 for the proposed project and the greatest likeli-
15 hood that the project will be maintained or ex-
16 panded after Federal assistance under this part
17 is completed; and

18 (C) exceed the minimum requirements of
19 subsection (c)(1)(B)(ii).

20 (e) PILOT PROJECT REQUIREMENTS.—

21 (1) MAXIMUM AMOUNT.—The Secretary shall
22 not provide more than \$20,000,000 in Federal as-
23 sistance under the pilot program to any applicant.

24 (2) COST SHARING.—The Secretary shall not
25 provide more than 50 percent of the cost, incurred

1 during the period of the grant, of any project under
2 the pilot program.

3 (3) MAXIMUM PERIOD OF GRANTS.—The Sec-
4 retary shall not fund any applicant under the pilot
5 program for more than 5 years.

6 (4) DEPLOYMENT AND DISTRIBUTION.—The
7 Secretary shall seek to the maximum extent prac-
8 ticable to ensure a broad geographic distribution of
9 project sites.

10 (5) TRANSFER OF INFORMATION AND KNOWL-
11 EDGE.—The Secretary shall establish mechanisms to
12 ensure that the information and knowledge gained
13 by participants in the pilot program are transferred
14 among the pilot program participants and to other
15 interested parties, including other applicants that
16 submitted applications.

17 (f) SCHEDULE.—

18 (1) PUBLICATION.—Not later than 90 days
19 after the date of enactment of this Act, the Sec-
20 retary shall publish in the Federal Register, Com-
21 merce Business Daily, and elsewhere as appropriate,
22 a request for applications to undertake projects
23 under the pilot program. Applications shall be due
24 within 180 days after the date of publication of the
25 notice.

1 (2) SELECTION.—Not later than 180 days after
2 the date by which applications for grants are due,
3 the Secretary shall select by competitive, peer re-
4 viewed proposal, all applications for projects to be
5 awarded a grant under the pilot program.

6 (g) LIMIT ON FUNDING.—The Secretary shall pro-
7 vide not less than 20 nor more than 25 percent of the
8 grant funding made available under this section for the
9 acquisition of ultra-low sulfur diesel vehicles.

10 **SEC. 723. REPORTS TO CONGRESS.**

11 (a) INITIAL REPORT.—Not later than 60 days after
12 the date on which grants are awarded under this part,
13 the Secretary shall submit to Congress a report
14 containing—

15 (1) an identification of the grant recipients and
16 a description of the projects to be funded;

17 (2) an identification of other applicants that
18 submitted applications for the pilot program; and

19 (3) a description of the mechanisms used by the
20 Secretary to ensure that the information and knowl-
21 edge gained by participants in the pilot program are
22 transferred among the pilot program participants
23 and to other interested parties, including other ap-
24 plicants that submitted applications.

1 (b) EVALUATION.—Not later than 3 years after the
2 date of enactment of this Act, and annually thereafter
3 until the pilot program ends, the Secretary shall submit
4 to Congress a report containing an evaluation of the effec-
5 tiveness of the pilot program, including—

6 (1) an assessment of the benefits to the envi-
7 ronment derived from the projects included in the
8 pilot program; and

9 (2) an estimate of the potential benefits to the
10 environment to be derived from widespread applica-
11 tion of alternative fueled vehicles and ultra-low sul-
12 fur diesel vehicles.

13 **SEC. 724. AUTHORIZATION OF APPROPRIATIONS.**

14 There are authorized to be appropriated to the Sec-
15 retary to carry out this part \$200,000,000, to remain
16 available until expended.

17 **PART 3—FUEL CELL BUSES**

18 **SEC. 731. FUEL CELL TRANSIT BUS DEMONSTRATION.**

19 (a) IN GENERAL.—The Secretary of Energy, in con-
20 sultation with the Secretary of Transportation, shall es-
21 tablish a transit bus demonstration program to make com-
22 petitive, merit-based awards for 5-year projects to dem-
23 onstrate not more than 12 fuel cell transit buses (and nec-
24 essary infrastructure) in 3 geographically dispersed local-
25 ities.

1 (b) PREFERENCE.—In selecting projects under this
2 section, the Secretary shall give preference to projects that
3 are most likely to mitigate congestion and improve air
4 quality.

5 (c) AUTHORIZATION OF APPROPRIATIONS.—There
6 are authorized to be appropriated to the Secretary to carry
7 out this section \$10,000,000 for each of fiscal years 2004
8 through 2007.

9 **Subtitle C—Clean School Buses**

10 **SEC. 741. DEFINITIONS.**

11 In this subtitle:

12 (1) ADMINISTRATOR.—The term “Adminis-
13 trator” means the Administrator of the Environ-
14 mental Protection Agency.

15 (2) ALTERNATIVE FUEL.—The term “alter-
16 native fuel” means liquefied natural gas, compressed
17 natural gas, liquefied petroleum gas, hydrogen, pro-
18 pane, or methanol or ethanol at no less than 85 per-
19 cent by volume.

20 (3) ALTERNATIVE FUEL SCHOOL BUS.—The
21 term “alternative fuel school bus” means a school
22 bus that meets all of the requirements of this sub-
23 title and is operated solely on an alternative fuel.

24 (4) EMISSIONS CONTROL RETROFIT TECH-
25 NOLOGY.—The term “emissions control retrofit tech-

1 nology” means a particulate filter or other emissions
2 control equipment that is verified or certified by the
3 Administrator or the California Air Resources Board
4 as an effective emission reduction technology when
5 installed on an existing school bus.

6 (5) IDLING.—The term “idling” means oper-
7 ating an engine while remaining stationary for more
8 than approximately 15 minutes, except that the term
9 does not apply to routine stoppages associated with
10 traffic movement or congestion.

11 (6) ULTRA-LOW SULFUR DIESEL FUEL.—The
12 term “ultra-low sulfur diesel fuel” means diesel fuel
13 that contains sulfur at not more than 15 parts per
14 million.

15 (7) ULTRA-LOW SULFUR DIESEL FUEL SCHOOL
16 BUS.—The term “ultra-low sulfur diesel fuel school
17 bus” means a school bus that meets all of the re-
18 quirements of this subtitle and is operated solely on
19 ultra-low sulfur diesel fuel.

20 **SEC. 742. PROGRAM FOR REPLACEMENT OF CERTAIN**
21 **SCHOOL BUSES WITH CLEAN SCHOOL BUSES.**

22 (a) ESTABLISHMENT.—The Administrator, in con-
23 sultation with the Secretary and other appropriate Federal
24 departments and agencies, shall establish a program for
25 awarding grants on a competitive basis to eligible entities

1 for the replacement of existing school buses manufactured
2 before model year 1991 with alternative fuel school buses
3 and ultra-low sulfur diesel fuel school buses.

4 (b) REQUIREMENTS.—

5 (1) IN GENERAL.—Not later than 90 days after
6 the date of enactment of this Act, the Administrator
7 shall establish and publish in the Federal Register
8 grant requirements on eligibility for assistance, and
9 on implementation of the program established under
10 subsection (a), including instructions for the submis-
11 sion of grant applications and certification require-
12 ments to ensure compliance with this subtitle.

13 (2) APPLICATION DEADLINES.—The require-
14 ments established under paragraph (1) shall require
15 submission of grant applications not later than—

16 (A) in the case of the first year of program
17 implementation, the date that is 180 days after
18 the publication of the requirements in the Fed-
19 eral Register; and

20 (B) in the case of each subsequent year,
21 June 1 of the year.

22 (c) ELIGIBLE RECIPIENTS.—A grant shall be award-
23 ed under this section only—

24 (1) to 1 or more local or State governmental
25 entities responsible for providing school bus service

1 to 1 or more public school systems or responsible for
2 the purchase of school buses;

3 (2) to 1 or more contracting entities that pro-
4 vide school bus service to 1 or more public school
5 systems, if the grant application is submitted jointly
6 with the 1 or more school systems to be served by
7 the buses, except that the application may provide
8 that buses purchased using funds awarded shall be
9 owned, operated, and maintained exclusively by the
10 1 or more contracting entities; or

11 (3) to a nonprofit school transportation associa-
12 tion representing private contracting entities, if the
13 association has notified and received approval from
14 the 1 or more school systems to be served by the
15 buses.

16 (d) AWARD DEADLINES.—

17 (1) IN GENERAL.—Subject to paragraph (2),
18 the Administrator shall award a grant made to a
19 qualified applicant for a fiscal year—

20 (A) in the case of the first fiscal year of
21 program implementation, not later than the
22 date that is 90 days after the application dead-
23 line established under subsection (b)(2); and

24 (B) in the case of each subsequent fiscal
25 year, not later than August 1 of the fiscal year.

1 (2) INSUFFICIENT NUMBER OF QUALIFIED
2 GRANT APPLICATIONS.—If the Administrator does
3 not receive a sufficient number of qualified grant ap-
4 plications to meet the requirements of subsection
5 (i)(1) for a fiscal year, the Administrator shall
6 award a grant made to a qualified applicant under
7 subsection (i)(2) not later than September 30 of the
8 fiscal year.

9 (e) TYPES OF GRANTS.—

10 (1) IN GENERAL.—A grant under this section
11 shall be used for the replacement of school buses
12 manufactured before model year 1991 with alter-
13 native fuel school buses and ultra-low sulfur diesel
14 fuel school buses.

15 (2) NO ECONOMIC BENEFIT.—Other than the
16 receipt of the grant, a recipient of a grant under this
17 section may not receive any economic benefit in con-
18 nection with the receipt of the grant.

19 (3) PRIORITY OF GRANT APPLICATIONS.—The
20 Administrator shall give priority to applicants that
21 propose to replace school buses manufactured before
22 model year 1977.

23 (f) CONDITIONS OF GRANT.—A grant provided under
24 this section shall include the following conditions:

1 (1) SCHOOL BUS FLEET.—All buses acquired
2 with funds provided under the grant shall be oper-
3 ated as part of the school bus fleet for which the
4 grant was made for a minimum of 5 years.

5 (2) USE OF FUNDS.—Funds provided under the
6 grant may only be used—

7 (A) to pay the cost, except as provided in
8 paragraph (3), of new alternative fuel school
9 buses or ultra-low sulfur diesel fuel school
10 buses, including State taxes and contract fees
11 associated with the acquisition of such buses;
12 and

13 (B) to provide—

14 (i) up to 20 percent of the price of the
15 alternative fuel school buses acquired, for
16 necessary alternative fuel infrastructure if
17 the infrastructure will only be available to
18 the grant recipient; and

19 (ii) up to 25 percent of the price of
20 the alternative fuel school buses acquired,
21 for necessary alternative fuel infrastructure
22 if the infrastructure will be available to the
23 grant recipient and to other bus fleets.

24 (3) GRANT RECIPIENT FUNDS.—The grant re-
25 cipient shall be required to provide at least—

1 (A) in the case of a grant recipient de-
2 scribed in paragraph (1) or (3) of subsection
3 (c), the lesser of—

4 (i) an amount equal to 15 percent of
5 the total cost of each bus received; or

6 (ii) \$15,000 per bus; and

7 (B) in the case of a grant recipient de-
8 scribed in subsection (c)(2), the lesser of—

9 (i) an amount equal to 20 percent of
10 the total cost of each bus received; or

11 (ii) \$20,000 per bus.

12 (4) ULTRA-LOW SULFUR DIESEL FUEL.—In the
13 case of a grant recipient receiving a grant for ultra-
14 low sulfur diesel fuel school buses, the grant recipi-
15 ent shall be required to provide documentation to
16 the satisfaction of the Administrator that diesel fuel
17 containing sulfur at not more than 15 parts per mil-
18 lion is available for carrying out the purposes of the
19 grant, and a commitment by the applicant to use
20 such fuel in carrying out the purposes of the grant.

21 (5) TIMING.—All alternative fuel school buses,
22 ultra-low sulfur diesel fuel school buses, or alter-
23 native fuel infrastructure acquired under a grant
24 awarded under this section shall be purchased and
25 placed in service as soon as practicable.

1 (g) BUSES.—

2 (1) IN GENERAL.—Except as provided in para-
3 graph (2), funding under a grant made under this
4 section for the acquisition of new alternative fuel
5 school buses or ultra-low sulfur diesel fuel school
6 buses shall only be used to acquire to school buses—

7 (A) with a gross vehicle weight of greater
8 than 14,000 pounds;

9 (B) that are powered by a heavy duty en-
10 gine;

11 (C) in the case of alternative fuel school
12 buses manufactured in model years 2003
13 through 2006, that emit not more than 1.8
14 grams per brake horsepower-hour of non-
15 methane hydrocarbons and oxides of nitrogen
16 and .01 grams per brake horsepower-hour of
17 particulate matter; and

18 (D) in the case of ultra-low sulfur diesel
19 fuel school buses manufactured in model years
20 2004 through 2006, that emit not more than
21 2.5 grams per brake horsepower-hour of non-
22 methane hydrocarbons and oxides of nitrogen
23 and .01 grams per brake horsepower-hour of
24 particulate matter.

1 (2) LIMITATIONS.—A bus shall not be acquired
2 under this section that emits nonmethane hydro-
3 carbons, oxides of nitrogen, or particulate matter at
4 a rate greater than the best performing technology
5 of the same class of ultra-low sulfur diesel fuel
6 school buses commercially available at the time the
7 grant is made.

8 (h) DEPLOYMENT AND DISTRIBUTION.—The Admin-
9 istrator shall—

10 (1) seek, to the maximum extent practicable, to
11 achieve nationwide deployment of alternative fuel
12 school buses and ultra-low sulfur diesel fuel school
13 buses through the program under this section; and
14 (2) ensure a broad geographic distribution of
15 grant awards, with a goal of no State receiving more
16 than 10 percent of the grant funding made available
17 under this section for a fiscal year.

18 (i) ALLOCATION OF FUNDS.—

19 (1) IN GENERAL.—Subject to paragraph (2), of
20 the amount of grant funding made available to carry
21 out this section for any fiscal year, the Adminis-
22 trator shall use—

23 (A) 70 percent for the acquisition of alter-
24 native fuel school buses or supporting infra-
25 structure; and

1 (B) 30 percent for the acquisition of ultra-
2 low sulfur diesel fuel school buses.

3 (2) INSUFFICIENT NUMBER OF QUALIFIED
4 GRANT APPLICATIONS.—**【**After the first fiscal year
5 in which this program is in effect,**】** *【What is the ra-*
6 *tionale for delaying the application of this para-*
7 *graph?】* if the Administrator does not receive a suf-
8 ficient number of qualified grant applications to
9 meet the requirements of subparagraph (A) or (B)
10 of paragraph (1) for a fiscal year, effective begin-
11 ning on August 1 of the fiscal year, the Adminis-
12 trator shall make the remaining funds available to
13 other qualified grant applicants under this section.

14 (j) REDUCTION OF SCHOOL BUS IDLING.—Each
15 local educational agency (as defined in section 9101 of the
16 Elementary and Secondary Education Act of 1965 (20
17 U.S.C. 7801)) that receives Federal funds under the Ele-
18 mentary and Secondary Education Act of 1965 (20 U.S.C.
19 6301 et seq.) is encouraged to develop a policy, consistent
20 with the health, safety, and welfare of students and the
21 proper operation and maintenance of school buses, to re-
22 duce the incidence of unnecessary school bus idling at
23 schools when picking up and unloading students.

24 (k) ANNUAL REPORT.—

1 (1) IN GENERAL.—Not later than January 31
2 of each year, the Administrator shall transmit to
3 Congress a report evaluating implementation of the
4 programs under this section and section 743.

5 (2) COMPONENTS.—The report shall include a
6 description of—

7 (A) the total number of grant applications
8 received;

9 (B) the number and types of alternative
10 fuel school buses, ultra-low sulfur diesel fuel
11 school buses, and retrofitted buses requested in
12 grant applications;

13 (C) grants awarded and the criteria used
14 to select the grant recipients;

15 (D) certified engine emission levels of all
16 buses purchased or retrofitted under the pro-
17 grams under this section and section 743; and

18 (E) any other information the Adminis-
19 trator considers appropriate.

20 (1) AUTHORIZATION OF APPROPRIATIONS.—There
21 are authorized to be appropriated to the Administrator to
22 carry out this section, to remain available until
23 expended—

24 (1) \$45,000,000 for fiscal year 2005;

25 (2) \$65,000,000 for fiscal year 2006;

1 (3) \$90,000,000 for fiscal year 2007; and

2 (4) such sums as are necessary for each of fis-
3 cal years 2008 and 2009.

4 **SEC. 743. DIESEL RETROFIT PROGRAM.**

5 (a) ESTABLISHMENT.—The Administrator, in con-
6 sultation with the Secretary, shall establish a program for
7 awarding grants on a competitive basis to entities for the
8 installation of retrofit technologies for diesel school buses.

9 (b) ELIGIBLE RECIPIENTS.—A grant shall be award-
10 ed under this section only—

11 (1) to a local or State governmental entity re-
12 sponsible for providing school bus service to 1 or
13 more public school systems;

14 (2) to 1 or more contracting entities that pro-
15 vide school bus service to 1 or more public school
16 systems, if the grant application is submitted jointly
17 with the 1 or more school systems that the buses
18 will serve, except that the application may provide
19 that buses purchased using funds awarded shall be
20 owned, operated, and maintained exclusively by the
21 1 or more contracting entities; or

22 (3) to a nonprofit school transportation associa-
23 tion representing private contracting entities, if the
24 association has notified and received approval from

1 the 1 or more school systems to be served by the
2 buses.

3 (c) AWARDS.—

4 (1) IN GENERAL.—The Administrator shall
5 seek, to the maximum extent practicable, to ensure
6 a broad geographic distribution of grants under this
7 section.

8 (2) PREFERENCES.—In making awards of
9 grants under this section, the Administrator shall
10 give preference to proposals that—

11 (A) will achieve the greatest reductions in
12 emissions of nonmethane hydrocarbons, oxides
13 of nitrogen, or particulate matter per proposal
14 or per bus; or

15 (B) involve the use of emissions control
16 retrofit technology on diesel school buses that
17 operate solely on ultra-low sulfur diesel fuel.

18 (d) CONDITIONS OF GRANT.—A grant shall be pro-
19 vided under this section on the conditions that—

20 (1) buses on which retrofit emissions-control
21 technology are to be demonstrated—

22 (A) will operate on ultra-low sulfur diesel
23 fuel where such fuel is reasonably available or
24 required for sale by State or local law or regula-
25 tion;

1 (B) were manufactured in model year 1991
2 or later; and

3 (C) will be used for the transportation of
4 school children to and from school for a min-
5 imum of 5 years;

6 (2) grants funds will be used for the purchase
7 of emission control retrofit technology, including
8 State taxes and contract fees; and

9 (3) grant recipients will provide at least 15 per-
10 cent of the total cost of the retrofit, including the
11 purchase of emission control retrofit technology and
12 all necessary labor for installation of the retrofit.

13 (e) VERIFICATION.—Not later than 90 days after the
14 date of enactment of this Act, the Administrator shall
15 publish in the Federal Register procedures to verify—

16 (1) the retrofit emissions-control technology to
17 be demonstrated;

18 (2) that buses powered by ultra-low sulfur die-
19 sel fuel on which retrofit emissions-control tech-
20 nology are to be demonstrated will operate on diesel
21 fuel containing not more than 15 parts per million
22 of sulfur; and

23 (3) that grants are administered in accordance
24 with this section.

1 (f) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to the Administrator to
3 carry out this section, to remain available until
4 expended—

5 (1) \$20,000,000 for fiscal year 2005;

6 (2) \$35,000,000 for fiscal year 2006;

7 (3) \$45,000,000 for fiscal year 2007; and

8 (4) such sums as are necessary for each of fis-
9 cal years 2008 and 2009.

10 **SEC. 744. FUEL CELL SCHOOL BUSES.**

11 (a) ESTABLISHMENT.—The Secretary shall establish
12 a program for entering into cooperative agreements—

13 (1) with private sector fuel cell bus developers
14 for the development of fuel cell-powered school
15 buses; and

16 (2) subsequently, with not less than 2 units of
17 local government using natural gas-powered school
18 buses and such private sector fuel cell bus developers
19 to demonstrate the use of fuel cell-powered school
20 buses.

21 (b) COST SHARING.—The non-Federal contribution
22 for activities funded under this section shall be not less
23 than—

24 (1) 20 percent for fuel infrastructure develop-
25 ment activities; and

1 (2) 50 percent for demonstration activities and
2 for development activities not described in paragraph
3 (1).

4 (c) REPORTS TO CONGRESS.—Not later than 3 years
5 after the date of enactment of this Act, and not later than
6 October 1, 2006, the Secretary shall transmit to Congress
7 a report that—

8 (1) evaluates the process of converting natural
9 gas infrastructure to accommodate fuel cell-powered
10 school buses; and

11 (2) assesses the results of the development and
12 demonstration program under this section.

13 (d) AUTHORIZATION OF APPROPRIATIONS.—There
14 are authorized to be appropriated to the Secretary to carry
15 out this section \$25,000,000 for the period of fiscal years
16 2004 through 2006.

17 **Subtitle D—Miscellaneous**

18 **SEC. 751. RAILROAD EFFICIENCY.**

19 (a) ESTABLISHMENT.—The Secretary of Energy
20 shall, in cooperation with the Secretary of Transportation
21 and the Administrator of the Environmental Protection
22 Agency, establish a cost-shared, public-private research
23 partnership involving the Federal Government, railroad
24 carriers, locomotive manufacturers and equipment sup-
25 pliers, and the Association of American Railroads, to de-

1 velop and demonstrate railroad locomotive technologies
2 that increase fuel economy, reduce emissions, and lower
3 costs of operation.

4 (b) AUTHORIZATION OF APPROPRIATIONS.—There
5 are authorized to be appropriated to the Secretary of En-
6 ergy to carry out this section—

7 (1) \$25,000,000 for fiscal year 2005;

8 (2) \$35,000,000 for fiscal year 2006; and

9 (3) \$50,000,000 for fiscal year 2007.

10 **SEC. 752. MOBILE EMISSION REDUCTIONS TRADING AND**
11 **CREDITING.**

12 (a) IN GENERAL.—Not later than 180 days after the
13 date of enactment of this Act, the Administrator of the
14 Environmental Protection Agency shall submit to Con-
15 gress a report on the experience of the Administrator with
16 the trading of mobile source emission reduction credits for
17 use by owners and operators of stationary source emission
18 sources to meet emission offset requirements within a non-
19 attainment area.

20 (b) CONTENTS.—The report shall describe—

21 (1) projects approved by the Administrator that
22 include the trading of mobile source emission reduc-
23 tion credits for use by stationary sources in com-
24 plying with offset requirements, including a descrip-
25 tion of—

- 1 (A) project and stationary sources location;
2 (B) volumes of emissions offset and trad-
3 ed;
4 (C) the sources of mobile emission reduc-
5 tion credits; and
6 (D) if available, the cost of the credits;
7 (2) the significant issues identified by the Ad-
8 ministrator in consideration and approval of trading
9 in the projects;
10 (3) the requirements for monitoring and assess-
11 ing the air quality benefits of any approved project;
12 (4) the statutory authority on which the Admin-
13 istrator has based approval of the projects;
14 (5) an evaluation of how the resolution of issues
15 in approved projects could be used in other projects;
16 and
17 (6) any other issues that the Administrator con-
18 siders relevant to the trading and generation of mo-
19 bile source emission reduction credits for use by sta-
20 tionary sources or for other purposes.

21 **SEC. 753. AVIATION FUEL CONSERVATION AND EMISSIONS.**

22 (a) IN GENERAL.—Not later than 60 days after the
23 date of enactment of this Act, the Administrator of the
24 Federal Aviation Administration and the Administrator of

1 the Environmental Protection Agency shall jointly initiate
2 a study to identify—

3 (1) the impact of aircraft emissions on air qual-
4 ity in nonattainment areas; and

5 (2) ways to promote fuel conservation measures
6 for aviation to—

7 (A) enhance fuel efficiency; and

8 (B) reduce emissions.

9 (b) FOCUS.—The study under subsection (a) shall
10 focus on how air traffic management inefficiencies, such
11 as aircraft idling at airports, result in unnecessary fuel
12 burn and air emissions.

13 (c) REPORT.—Not later than 180 days after the date
14 of the initiation of the study under subsection (a), the Ad-
15 ministrator of the Federal Aviation Administration and
16 the Administrator of the Environmental Protection Agen-
17 cy shall jointly submit to the Committee on Energy and
18 Commerce and the Committee on Transportation and In-
19 frastructure of the House of Representatives and the Com-
20 mittee on Environment and Public Works and the Com-
21 mittee on Commerce, Science, and Transportation of the
22 Senate a report that—

23 (1) describes the results of the study; and

1 (2) includes any recommendations on ways in
2 which unnecessary fuel use and emissions affecting
3 air quality may be reduced—

4 (A) without adversely affecting safety and
5 security and increasing individual aircraft noise;
6 and

7 (B) while taking into account all aircraft
8 emissions and the impact of the emissions on
9 human health.

10 **SEC. 754. DIESEL FUELED VEHICLES.**

11 (a) DEFINITION OF TIER 2 EMISSION STANDARDS.—
12 In this section, the term “tier 2 emission standards”
13 means the motor vehicle emission standards that apply to
14 passenger cars, light trucks, and larger passenger vehicles
15 manufactured after the 2003 model year, as promulgated
16 on February 10, 2000, by the Administrator of the Envi-
17 ronmental Protection Agency under sections 202 and 211
18 of the Clean Air Act (42 U.S.C. 7521, 7545).

19 (b) DIESEL COMBUSTION AND AFTER-TREATMENT
20 TECHNOLOGIES.—The Secretary of Energy shall accel-
21 erate efforts to improve diesel combustion and after-treat-
22 ment technologies for use in diesel fueled motor vehicles.

23 (c) GOALS.—The Secretary shall carry out subsection
24 (b) with a view toward achieving the following goals:

1 (1) Developing and demonstrating diesel tech-
2 nologies that, not later than 2010, meet the fol-
3 lowing standards:

4 (A) Tier 2 emission standards.

5 (B) The heavy-duty emissions standards of
6 2007 that are applicable to heavy-duty vehicles
7 under regulations promulgated by the Adminis-
8 trator of the Environmental Protection Agency
9 as of the date of enactment of this Act.

10 (2) Developing the next generation of low-emis-
11 sion, high efficiency diesel engine technologies, in-
12 cluding homogeneous charge compression ignition
13 technology.

14 **SEC. 755. CONSERVE BY BICYCLING PROGRAM.**

15 (a) DEFINITIONS.—In this section:

16 (1) PROGRAM.—The term “program” means
17 the Conserve by Bicycling Program established by
18 subsection (b).

19 (2) SECRETARY.—The term “Secretary” means
20 the Secretary of Transportation.

21 (b) ESTABLISHMENT.—There is established within
22 the Department of Transportation a program to be known
23 as the “Conserve by Bicycling Program”.

24 (c) PROJECTS.—

1 (1) IN GENERAL.—In carrying out the program,
2 the Secretary shall establish not more than 10 pilot
3 projects that are—

4 (A) dispersed geographically throughout
5 the United States; and

6 (B) designed to conserve energy resources
7 by encouraging the use of bicycles in place of
8 motor vehicles.

9 (2) REQUIREMENTS.—A pilot project described
10 in paragraph (1) shall—

11 (A) use education and marketing to con-
12 vert motor vehicle trips to bicycle trips;

13 (B) document project results and energy
14 savings (in estimated units of energy con-
15 served);

16 (C) facilitate partnerships among inter-
17 ested parties in at least 2 of the fields of—

18 (i) transportation;

19 (ii) law enforcement;

20 (iii) education;

21 (iv) public health;

22 (v) environment; and

23 (vi) energy;

24 (D) maximize bicycle facility investments;

1 (E) demonstrate methods that may be
2 used in other regions of the United States; and

3 (F) facilitate the continuation of ongoing
4 programs that are sustained by local resources.

5 (3) COST SHARING.—At least 20 percent of the
6 cost of each pilot project described in paragraph (1)
7 shall be provided from State or local sources.

8 (d) ENERGY AND BICYCLING RESEARCH STUDY.—

9 (1) IN GENERAL.—Not later than 2 years after
10 the date of enactment of this Act, the Secretary
11 shall enter into a contract with the National Acad-
12 emy of Sciences for, and the National Academy of
13 Sciences shall conduct and submit to Congress a re-
14 port on, a study on the feasibility of converting
15 motor vehicle trips to bicycle trips.

16 (2) COMPONENTS.—The study shall—

17 (A) document the results or progress of
18 the pilot projects under subsection (c);

19 (B) determine the type and duration of
20 motor vehicle trips that people in the United
21 States may feasibly make by bicycle, taking into
22 consideration factors such as—

23 (i) weather;

24 (ii) land use and traffic patterns;

1 (iii) the carrying capacity of bicycles;

2 and

3 (iv) bicycle infrastructure;

4 (C) determine any energy savings that
5 would result from the conversion of motor vehi-
6 cle trips to bicycle trips;

7 (D) include a cost-benefit analysis of bicy-
8 cle infrastructure investments; and

9 (E) include a description of any factors
10 that would encourage more motor vehicle trips
11 to be replaced with bicycle trips.

12 (e) AUTHORIZATION OF APPROPRIATIONS.—There
13 are authorized to be appropriated to the Secretary to carry
14 out this section \$6,200,000, to remain available until ex-
15 pended, of which—

16 (1) \$5,150,000 shall be used to carry out pilot
17 projects described in subsection (c);

18 (2) \$300,000 shall be used by the Secretary to
19 coordinate, publicize, and disseminate the results of
20 the program; and

21 (3) \$750,000 shall be used to carry out sub-
22 section (d).

23 **SEC. 756. REDUCTION OF ENGINE IDLING OF HEAVY-DUTY**
24 **VEHICLES.**

25 (a) DEFINITIONS.—In this section:

1 (1) ADMINISTRATOR.—The term “Adminis-
2 trator” means the Administrator of the Environ-
3 mental Protection Agency.

4 (2) ADVANCED TRUCK STOP ELECTRIFICATION
5 SYSTEM.—The term “advanced truck stop elec-
6 trification system” means a stationary system that
7 delivers heat, air conditioning, electricity, and com-
8 munications, and is capable of providing verifiable
9 and auditable evidence of use of those services, to a
10 heavy-duty vehicle and any occupants of the heavy-
11 duty vehicle without relying on components mounted
12 onboard the heavy-duty vehicle for delivery of those
13 services.

14 (3) AUXILIARY POWER UNIT.—The term “auxil-
15 iary power unit” means an integrated system that—

16 (A) provides heat, air conditioning, engine
17 warming, and electricity to the factory-installed
18 components on a heavy-duty vehicle as if the
19 main drive engine of the heavy-duty vehicle
20 were running; and

21 (B) is certified by the Administrator under
22 part 89 of title 40, Code of Federal Regulations
23 (or any successor regulation), as meeting appli-
24 cable emission standards.

1 (4) HEAVY-DUTY VEHICLE.—The term “heavy-
2 duty vehicle” means a vehicle that—

3 (A) has a gross vehicle weight rating great-
4 er than 12,500 pounds; and

5 (B) is powered by a diesel engine.

6 (5) IDLE REDUCTION TECHNOLOGY.—The term
7 “idle reduction technology” means an advanced
8 truck stop electrification system, auxiliary power
9 unit, or other device or system of devices that—

10 (A) is used to reduce long-duration idling
11 of a heavy-duty vehicle; and

12 (B) allows for the main drive engine or
13 auxiliary refrigeration engine of a heavy-duty
14 vehicle to be shut down.

15 (6) LONG-DURATION IDLING.—

16 (A) IN GENERAL.—The term “long-dura-
17 tion idling” means the operation of a main
18 drive engine or auxiliary refrigeration engine of
19 a heavy-duty vehicle, for a period greater than
20 15 consecutive minutes, at a time at which the
21 main drive engine is not engaged in gear.

22 (B) EXCLUSIONS.—The term “long-dura-
23 tion idling” does not include the operation of a
24 main drive engine or auxiliary refrigeration en-
25 gine of a heavy-duty vehicle during a routine

1 stoppage associated with traffic movement or
2 congestion.

3 (b) IDLE REDUCTION TECHNOLOGY BENEFITS, PRO-
4 GRAMS, AND STUDIES.—

5 (1) IN GENERAL.—Not later than 90 days after
6 the date of enactment of this Act, the Administrator
7 shall—

8 (A)(i) commence a review of the mobile
9 source air emission models of the Environ-
10 mental Protection Agency used under the Clean
11 Air Act (42 U.S.C. 7401 et seq.) to determine
12 whether the models accurately reflect the emis-
13 sions resulting from long-duration idling of
14 heavy-duty vehicles and other vehicles and en-
15 gines; and

16 (ii) update those models as the Adminis-
17 trator determines to be appropriate; and

18 (B)(i) commence a review of the emission
19 reductions achieved by the use of idle reduction
20 technology; and

21 (ii) complete such revisions of the regula-
22 tions and guidance of the Environmental Pro-
23 tection Agency as the Administrator determines
24 to be appropriate.

1 (2) DEADLINE FOR COMPLETION.—Not later
2 than 180 days after the date of enactment of this
3 Act, the Administrator shall—

4 (A) complete the reviews under subpara-
5 graphs (A)(i) and (B)(i) of paragraph (1); and

6 (B) prepare and make publicly available 1
7 or more reports on the results of the reviews.

8 (3) DISCRETIONARY INCLUSIONS.—The reviews
9 under subparagraphs (A)(i) and (B)(i) of paragraph
10 (1) and the reports under paragraph (2)(B) may ad-
11 dress the potential fuel savings resulting from use of
12 idle reduction technology.

13 (4) IDLE REDUCTION DEPLOYMENT PRO-
14 GRAM.—

15 (A) ESTABLISHMENT.—

16 (i) IN GENERAL.—Not later than 90
17 days after the date of enactment of this
18 Act, the Administrator, in consultation
19 with the Secretary of Transportation, shall
20 establish a program to support deployment
21 of idle reduction technology.

22 (ii) PRIORITY.—The Administrator
23 shall give priority to the deployment of idle
24 reduction technology based on beneficial ef-

1 fects on air quality and ability to lessen
2 the emission of criteria air pollutants.

3 (B) FUNDING.—

4 (i) AUTHORIZATION OF APPROPRIA-
5 TIONS.—There are authorized to be appro-
6 priated to the Administrator to carry out
7 subparagraph (A) \$19,500,000 for fiscal
8 year 2004, \$30,000,000 for fiscal year
9 2005, and \$45,000,000 for fiscal year
10 2006.

11 (ii) COST SHARING.—Subject to clause
12 (iii), the Administrator shall require at
13 least 50 percent of the costs directly and
14 specifically related to any project under
15 this section to be provided from non-Fed-
16 eral sources.

17 (iii) NECESSARY AND APPROPRIATE
18 REDUCTIONS.—The Administrator may re-
19 duce the non-Federal requirement under
20 clause (ii) if the Administrator determines
21 that the reduction is necessary and appro-
22 priate considering the technological risks
23 involved in the project and is necessary to
24 meet the objectives of this section.

25 (5) IDLING LOCATION STUDY.—

1 (A) IN GENERAL.—Not later than 90 days
2 after the date of enactment of this Act, the Sec-
3 retary of Transportation, in consultation with
4 the Administrator, shall commence a study to
5 analyze all locations at which heavy-duty vehi-
6 cles stop for long-duration idling, including—

- 7 (i) truck stops;
8 (ii) rest areas;
9 (iii) border crossings;
10 (iv) ports;
11 (v) transfer facilities; and
12 (vi) private terminals.

13 (B) DEADLINE FOR COMPLETION.—Not
14 later than 180 days after the date of enactment
15 of this Act, the Secretary shall—

- 16 (i) complete the study under subpara-
17 graph (A); and
18 (ii) prepare and make publicly avail-
19 able 1 or more reports of the results of the
20 study.

21 (c) VEHICLE WEIGHT EXEMPTION.—Section 172(a)
22 of title 23, United States Code, is amended—

- 23 (1) by designating the first through eleventh
24 sentences as paragraphs (1) through (11), respec-
25 tively; and

1 (2) by adding at the end the following:

2 “(12) HEAVY DUTY VEHICLES.—

3 “(A) IN GENERAL.—Subject to subpara-
4 graphs (B) and (C), in order to promote reduc-
5 tion of fuel use and emissions because of engine
6 idling, the maximum gross vehicle weight limit
7 and the axle weight limit for any heavy-duty ve-
8 hicle equipped with an idle reduction technology
9 shall be increased by a quantity necessary to
10 compensate for the additional weight of the idle
11 reduction system.

12 “(B) MAXIMUM WEIGHT INCREASE.—The
13 weight increase under subparagraph (A) shall
14 be not greater than 250 pounds.

15 “(C) PROOF.—On request by a regulatory
16 agency or law enforcement agency, the vehicle
17 operator shall provide proof (through dem-
18 onstration or certification) that—

19 “(i) the idle reduction technology is
20 fully functional at all times; and

21 “(ii) the 250-pound gross weight in-
22 crease is not used for any purpose other
23 than the use of idle reduction technology
24 described in subparagraph (A).”.

1 **SEC. 757. BIODIESEL ENGINE TESTING PROGRAM.**

2 (a) IN GENERAL.—Not later than 180 days after the
3 date of enactment of this Act, the Secretary shall initiate
4 a partnership with diesel engine, diesel fuel injection sys-
5 tem, and diesel vehicle manufacturers and diesel and bio-
6 diesel fuel providers, to include biodiesel testing in ad-
7 vanced diesel engine and fuel system technology.

8 (b) SCOPE.—The program shall provide for testing
9 to determine the impact of biodiesel from different sources
10 on current and future emission control technologies, with
11 emphasis on—

12 (1) the impact of biodiesel on emissions war-
13 ranty, in-use liability, and antitampering provisions;

14 (2) the impact of long-term use of biodiesel on
15 engine operations;

16 (3) the options for optimizing these technologies
17 for both emissions and performance when switching
18 between biodiesel and diesel fuel; and

19 (4) the impact of using biodiesel in these fuel-
20 ing systems and engines when used as a blend with
21 2006 Environmental Protection Agency-mandated
22 diesel fuel containing a maximum of 15-parts-per-
23 million sulfur content.

24 (c) REPORT.—Not later than 2 years after the date
25 of enactment of this Act, the Secretary shall provide an
26 interim report to Congress on the findings of the program,

1 including a comprehensive analysis of impacts from bio-
2 diesel on engine operation for both existing and expected
3 future diesel technologies, and recommendations for en-
4 suring optimal emissions reductions and engine perform-
5 ance with biodiesel.

6 (d) AUTHORIZATION OF APPROPRIATIONS.—There
7 are authorized to be appropriated \$5,000,000 for each of
8 fiscal years 2004 through 2008 to carry out this section.

9 (e) DEFINITION.—For purposes of this section, the
10 term “biodiesel” means a diesel fuel substitute produced
11 from nonpetroleum renewable resources that meets the
12 registration requirements for fuels and fuel additives es-
13 tablished by the Environmental Protection Agency under
14 section 211 of the Clean Air Act (42 U.S.C. 7545) and
15 that meets the American Society for Testing and Materials
16 D6751-02a Standard Specification for Biodiesel Fuel
17 (B100) Blend Stock for Distillate Fuels.

18 **Subtitle E—Automobile Efficiency**

19 **SEC. 771. AUTHORIZATION OF APPROPRIATIONS FOR IM-** 20 **PLEMENTATION AND ENFORCEMENT OF** 21 **FUEL ECONOMY STANDARDS.**

22 In addition to any other funds authorized by law,
23 there are authorized to be appropriated to the National
24 Highway Traffic Safety Administration to carry out its ob-

1 ligations with respect to average fuel economy standards
2 \$2,000,000 for each of fiscal years 2004 through 2008.

3 **SEC. 772. REVISED CONSIDERATIONS FOR DECISIONS ON**
4 **MAXIMUM FEASIBLE AVERAGE FUEL ECON-**
5 **OMY.**

6 Section 32902(f) of title 49, United States Code, is
7 amended to read as follows:

8 “(f) CONSIDERATIONS FOR DECISIONS ON MAXIMUM
9 FEASIBLE AVERAGE FUEL ECONOMY.—When deciding
10 maximum feasible average fuel economy under this sec-
11 tion, the Secretary of Transportation shall consider the
12 following matters:

13 “(1) Technological feasibility.

14 “(2) Economic practicability.

15 “(3) The effect of other motor vehicle standards
16 of the Government on fuel economy.

17 “(4) The need of the United States to conserve
18 energy.

19 “(5) The effects of fuel economy standards on
20 passenger automobiles, nonpassenger automobiles,
21 and occupant safety.

22 “(6) The effects of compliance with average fuel
23 economy standards on levels of automobile industry
24 employment in the United States.”.

1 **SEC. 773. EXTENSION OF MAXIMUM FUEL ECONOMY IN-**
2 **CREASE FOR ALTERNATIVE FUELED VEHI-**
3 **CLES.**

4 (a) MANUFACTURING INCENTIVES.—Section 32905
5 of title 49, United States Code, is amended—

6 (1) in each of subsections (b) and (d), by strik-
7 ing “1993–2004” and inserting “1993–2008”;

8 (2) in subsection (f), by striking “2001” and
9 inserting “2005”; and

10 (3) in subsection (f)(1), by striking “2004” and
11 inserting “2008”.

12 (b) MAXIMUM FUEL ECONOMY INCREASE.—Sub-
13 section (a)(1) of section 32906 of title 49, United States
14 Code, is amended—

15 (1) in subparagraph (A), by striking “the model
16 years 1993–2004” and inserting “model years
17 1993–2008”; and

18 (2) in subparagraph (B), by striking “the model
19 years 2005–2008” and inserting “model years
20 2009–2012”.

21 **SEC. 774. STUDY OF FEASIBILITY AND EFFECTS OF REDUC-**
22 **ING USE OF FUEL FOR AUTOMOBILES.**

23 (a) IN GENERAL.—Not later than 30 days after the
24 date of the enactment of this Act, the Administrator of
25 the National Highway Traffic Safety Administration shall
26 initiate a study of the feasibility and effects of reducing

1 by model year 2012, by a significant percentage, the
2 amount of fuel consumed by automobiles.

3 (b) SUBJECTS OF STUDY.—The study under this sec-
4 tion shall include—

5 (1) examination of, and recommendation of al-
6 ternatives to, the policy under current Federal law
7 of establishing average fuel economy standards for
8 automobiles and requiring each automobile manufac-
9 turer to comply with average fuel economy standards
10 that apply to the automobiles it manufactures;

11 (2) examination of how automobile manufactur-
12 ers could contribute toward achieving the reduction
13 referred to in subsection (a);

14 (3) examination of the potential of fuel cell
15 technology in motor vehicles in order to determine
16 the extent to which such technology may contribute
17 to achieving the reduction referred to in subsection
18 (a); and

19 (4) examination of the effects of the reduction
20 referred to in subsection (a) on—

21 (A) gasoline supplies;

22 (B) the automobile industry, including
23 sales of automobiles manufactured in the
24 United States;

25 (C) motor vehicle safety; and

1 (D) air quality.

2 (c) REPORT.—The Administrator shall submit to the
3 Congress a report on the findings, conclusion, and rec-
4 ommendations of the study under this section by not later
5 than 1 year after the date of the enactment of this Act.